A NEW SPECIES OF LOMATIUM (UMBELLIFERAE) FROM WYOMING

ERWIN F. EVERT 1476 Tyrell, Park Ridge, IL 60068

ABSTRACT

A new species of *Lomatium* from Park County, Wyoming is described and illustrated. **Lomatium attenuatum** is distinguished by its inconspicuous involucel, elongate pedicels, and glabrous fruit with only 2 commissural vittae. It is compared with $L.\ cous$ and other species, but its relationships are unclear.

Lomatium attenuatum Evert, sp. nov.

Herba perennis, brevicaulis 10–25 cm alta, plus minusve scaberula, e radice palari incrassata. Folia, 3-pinnata; laminae ovatae 2–11 cm longae, 1.5–10 cm latae; divisionibus ultimis linearibus, 2–5 mm longis, 0.5–1.5 mm latis; petioli 1.5–5 cm longi. Pedunculi 1–4, 10–15 cm longi. Radii fertiles 5–8 patentes, 3–5 cm longi. Involucellum absens vel 1–6 bracteolis attenuatis inconspicuis. Umbellulae ca. 15 floribus. Pedicelli fructificantes 3–10 mm longi. Petala et antherae flavae. Fructus oblongus-ellipticus, 5–8 mm longus, 3–5 mm latus, alae angustae, 0.5–0.75 mm latae; vittae prominentes, in intervallis 1, ad commissuras 2 (Fig. 1).

Plant perennial, short-caulescent, with only 1 or 2 cauline leaves, more or less scaberulous, (7-)10-25 cm tall, from an elongated thickened taproot and also occasionally from a several-branched caudex; leaves petiolate, 3-pinnate or ternately 3-pinnate, blades 2.0-11 cm long, 1.5-10 cm wide, ovate in outline, the ultimate divisions linear to oblanceolate, 2-5 mm long, 0.5-1.5 mm wide, obtuse to somewhat acute and mucronulate; petioles 1.5-5 cm long, the dilated and scarious sheathing extending to the middle or above; peduncles 1-3(-4), scaberulous, exceeding the leaves in fruit, 10-15 cm long; involucre usually absent but occasionally 1 inconspicuous, filiform bract present; fertile rays 5-8, spreading, angled, unequal, (1.5-)3-5 cm long in fruit; sterile rays 4-8, spreading, 3-10 mm long in fruit; involucel absent or of 1-6 inconspicuous linear-lanceolate, attenuate, non-connate bractlets, 1-4 mm long; umbellets ca. 15-flowered, only 2-6 developing into fruit; pedicels 3-10 mm long in fruit; petals 1.5 mm long including the incurved apex, yellow, obovate, glabrous; sepals inconspicuous; anthers ca. 0.5 mm long, yellow; styles 1-1.5 mm long, spreading or reflexed; ovaries glabrous to slightly scaberulous; fruit oblong-elliptic. glabrous, glossy, 5–8 mm long, 3–5 mm wide, the wings ca. 0.5–0.75

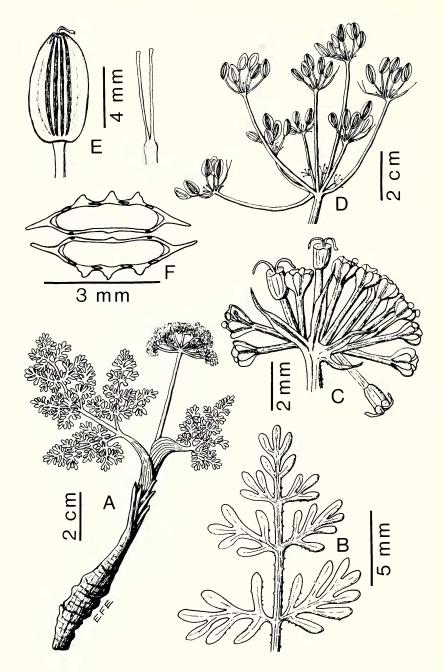


FIG. 1. Lonatium attenuatum. From Evert 1756. A. Flowering habit. B. Leaflet dissection C. Flowering umbellet. D. Fruiting umbel. E. Mature fruit and carpophore. F. Fruit transection.

mm wide, narrower than the body; oil tubes prominent, 1 in each interval, 2 on the commissure; carpophore bipartite.

Type: USA, WY, Park Co., Absaroka Range on ridge e. of Elk Fork Cr., ca. 1.6 km s. of Hwy 14, T52N R106W SW ¼ S29, 1876 m; open, dry, rocky soil with Antennaria umbrinella, Haplopappus acaulis, Phlox hoodii, and Oryzopsis hymenoides, 19 May and 26 Jun 1980, E. F. Evert 1756 (Holotype: RM; isotypes: MO, NY, UC, MOR).

PARATYPES: USA, WY, Park Co., Absaroka Range along Sweetwater Creek Rd. ca. 1.6 km n. of Hwy 14, T52N R106W, NW ½ S16, 1860 m, 20 Jun 1975, Evert 811 (RM); Shoshone Canyon, just below Buffalo Bill Dam, T52N R103W S1, 1616 m, 29 May 1980, Hartman and Dueholm 11409 (RM); on s. slopes of Pat O'Hara Peak, ca. 29 km nw. of Cody, T54N R104W S15 SW ¼, 2745 m, 16 Jul 1981, Evert 3179 (RM); sw. side of Rattlesnake Mtn. ca. 13 km w. of Cody T53N R103W S35 NE ¼, 2623 m, 17 Jul 1981, Evert 3203 (RM); on ridge above Cougar and Pagoda Creeks, ca. 7 km s. of Hwy 14, T51N R106W, S10 SW ¼, 2623 m, 22 Jul 1981, Evert 3278 (RM).

Habitat and distribution. Open, dry, rocky areas in lithosols derived from volcanic material or limestone at elevations of 1616–2745 m in or along the border of the Absaroka Range, Park Co., Wyoming.

Leaves appear with the flowers in mid-May to mid-June depending on elevation; mature fruit is produced about 4 weeks later. Derivation of epithet is from the Latin in reference to the bractlets of the involucel.

Lomatium attenuatum was first collected by the author in 1975 during floristic studies of the North Fork Shoshone River drainage in northwest Wyoming. It was thought at the time that it might be an undescribed variety, with abbreviated involucel, of the widespread and variable L. cous (S. Wats.) C. & R. complex, including L. circumdatum (S. Wats.) C. & R. and L. montanum C. & R., of Cronquist (1961). However, subsequent collections indicated that it was evidently an undescribed species. Lomatium attenuatum does resemble the L. cous complex in habit, leaf dissection, and fruit size, shape and texture, but differs in its greater over-all scabrosity, inconspicuous involucel, elongate pedicels, and distribution of vittae on the fruit. Although it is probably most closely related to the L. cous complex, L. attenuatum also resembles L. vaginatum C. & R. in its overall scabrosity and elongate pedicels and L. canbyi C. & R. in its similar leaf dissection, involucel, and elongate pedicels; but it differs from the former in fruit size, distribution of vittae, and leaf dissection and from the latter in flower color and in the lack of a globose, tuberous root. It appears that the exact relationships of L. attenuatum with other Lomatium species are unclear.

ACKNOWLEDGMENTS

I wish to thank Lincoln Constance for useful comments concerning taxonomy, William Hess for commenting on the manuscript, Ronald Hartman for courtesies extended and Ian McPhail for correcting the Latin diagnosis.

LITERATURE CITED

Cronquist, A. 1961. Umbelliferae. *In C. L. Hitchcock et al. Vascular plants of the Pacific Northwest. Part 3:506–586. Univ. Washington Press, Seattle.*

(Received 26 Mar 1982; revision accepted 1 Jun 1982.)